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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,631	03/14/2005	Jacques Leclercq	266831US6PCT	7109
22850	7590	08/15/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
DEHGHAN, QUEENIE S				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
08/15/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/527,631

Applicant(s)

LECLERCQ ET AL.

Examiner

Queenie Dehghan

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) 43-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- Paper No(s)/Mail Date 3/14/05, 7/28/06, 1/16/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 25-42 in the reply filed on July 15, 2008 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 30 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 30 recites a blowing of air on each side of the glass sheet as well as blowing on just one side. The two contradict each other making the claim unclear. Claim 36 is unclear what variations in dimensions are being referred to, variations compared to the desired bending radius?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 25-26, 28, 31, 33, 34 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshizawa (2006/0144090). Yoshizawa discloses a method for producing bent glass sheets comprising bending glass sheets by running them over a curved shaping bed, after the glass has been preheated to a softening temperature, progressively giving them a desired bent shape. Yoshizawa also discloses blowing air continuously onto a face of the running glass sheet under conditions capable of asymmetrically influencing a final concavity of the bent glass sheet, wherein the blowing air is performed in between an initial bending phase and a final bending phase ([0014]-[0017], figs. 2, 3, 6, 8, 16).
6. Regarding claims 26 and 28, the blowing of air onto a face of the glass sheet is performed across an entire transverse region of the glass sheet with respect to the axis along which the glass sheet run (fig. 2).
7. Regarding claim 31, the air blown is cold enough for the blowing to have an influence on the final bending ([0010]-[0017], [0148]-[0152]).
8. Regarding claim 33, cool air is blown producing a reduction in concavity on the same side of face receiving the blowing ([0029], [0140]).
9. Regarding claim 34, cool air is blown so as to give further concavity in a plane perpendicular to the run direction (figure 2, [0140]).
10. Regarding claim 39, the glass sheets are made to run in a planar trajectory through a reheat furnace and then in a trajectory with a curved profile tangential to the planar trajectory over a shaping bed of shaping rods and the blowing is performed along the curved profile trajectory after the glass sheets have begun to take shape (fig. 3).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090) in view of Sugawara et al. (5,837,026). Yoshizawa teaches blowing air on a transverse region and on both side of the glass sheet, as mentioned above, but does teach blowing air on only one side of the sheet with respect to an axis. Yoshizawa also teach controlling the cooling effect of the blown air to selective effect the concavity of the bent glass sheet. Sugawara teaches a blowing air on bent glass sheet on a portion of the glass sheet, for instance one side of the glass sheet to selectively cool that portion of the glass sheet (col.7 lines 2-12). Although the Sugawara teaches blowing air on the corner portions of the glass sheet, it would have

been obvious to one of ordinary skill in the art at the time of the invention to selectively blow air on any desired portion of the glass sheet, such as on just one side of the glass sheet with respect to the axis along, in order to achieve the desired cooling effect and temperature profile on the glass sheet.

14. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090) in view of Honjo et al. (2002/0095954). Yoshizawa fails to disclose a blowing of hot air to influence the final bending. Honjo teaches the blowing of hot air against a sheet glass to influence the bending of sheet glass, so that the sheet glass takes on curved profile of the shaping bed ([0053]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized hot air in the process of Yoshizawa in the step of blowing air onto the glass sheet in the shaping bed in order to heat up the glass to a temperature sufficient for taking on the shape of the shaping bed without any other external influence.

15. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090) in view of Artani et al. (4,735,646). Yoshizawa fails to disclose a specific pressure of the air blown on the glass sheet while quenching the sheet in a shaping bed to provide a desired curved profile. Artani teaches blowing air on a glass sheet to quench the hot glass sheet by directing air onto the glass sheet at a pressure of 0.05kg/cm² (col. 2 lines 35-58, col. 6 lines 23-36). Such an air pressure ensures a high cooling capability of the glass sheets (col. 5 lines 3-17). It would have been obvious to one of ordinary skill in the art at the time of the invention to have employ the air pressure taught by Artani for the air blown the glass sheets on the

shaping bed because such pressure ensures the cooling effect desired for handling bent glass sheets produced for automobile used.

16. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090). Yoshizawa teaches controlling the blowing air to achieve any desired curved profile on the glass sheets and provides an example of a glass sheet with a radius of curvature of 30,000 mm (30 m) in the length and a radius of curvature of 1,300 mm (1.3 m) in the width. It would have been obvious to one of ordinary skill in the art at the time of the invention to have selectively applied any desired radius of curvature, such as a radius of curvature of a line parallel to the run direction ranging from 1 meter to infinity and a radius of curvature of a line perpendicular to the run direction ranging from 5 meters to infinity, to the glass sheet by controlling of the blowing air on the sheet, as taught by Yoshizawa.

17. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090) in view of Honjo et al. (JP Abstract 2000-281367). Yoshizawa teaches an initial bending step followed by continued bending in a trajectory with a curved profile over a shaping bed of shaping, blowing being performed along the curved profile trajectory (fig. 2). However, the initial bending of Yoshizawa is a pressing step. Honjo teaches a method for bending sheet glass comprising an initial and subsequent bending step comprising shaping rods with a curved profile, wherein the initial bending is performed by sag bending (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to have alternatively utilized sag bending to preshaped the glass sheet in the process of Yoshizawa since Honjo

teaches that is well known in the art to sag bending glass sheets while still accomplishing the same results of a curved profile on the glass sheet.

18. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa (2006/0144090) in view of Letemps et al. (5,562,750). Yoshizawa fails to disclose a toughening step. Letemps teaches a method for bending sheet glass comprising running sheets over a shaping bed while blowing air at the sheet glass and toughening the sheet glass before the end of bending (col. 1 lines 20-23, col. 3 lines 15-27, col. 4 lines 15-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized a subsequent toughening step in order to provide proper strengthening of the glass sheet for automobile use.

19. Claims 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa and Letemps et al., as applied to claim 41 above, in further view of Aratani et al. (4,735,646). Letemps fails to disclose a toughening air pressure. Aratani teaches moving glass sheets at a temperature of 600-700°C to a toughening step, wherein air is blown onto the glass sheets by directing air at a pressure of 0.3kg/cm^3 ($2.94 \times 10^4 \text{ Pa}$) onto the face of the glass sheet. It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the air pressure of Aratani in the toughening process step in order to provide the sufficient tempering for the glass sheet for automobile use.

Double Patenting

20. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

21. Claim 25 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 29 and 42 of copending Application No. 10/578,779. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite the method steps of bringing a glass sheet to a softening temperature, running the sheet on a curved profile shaping bed to bend the sheet, and blowing air continuously on at least one face of the glass sheet under conditions to asymmetrically influencing a final concavity of the bent glass sheet.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie Dehghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Q Dehghan

/Eric Hug/
Primary Examiner, Art Unit 1791